




# Communicating Science to Elected Officials

NUFO 2016 Annual Meeting

Jennifer Greenamoyer  
American Institute of Physics  
[jgreenamoyer@aip.org](mailto:jgreenamoyer@aip.org)  
301.209.3104

Paul Runci  
NUFO (SSURF) Chair

- 
- The slide features abstract green geometric shapes. On the right side, there is a large, complex shape composed of several overlapping triangles in various shades of green, ranging from light lime to dark forest green. On the left side, there is a smaller, solid green triangle pointing upwards.
1. Importance of Communication & Engagement
  2. Tools for Communicating
  3. Crafting your message for Congressional visits (breakout groups)

# Importance of communication & engagement

- ▶ Tight budget/growth of entitlements means potential cuts for key science agencies and programs
- ▶ Questions will be asked about science funding- has it been well spent and what has resulted from it?
- ▶ Inexperienced Congress
- ▶ Defend against unfavorable Congressional actions & prevent gov action that can harm scientist's ability to conduct science
- ▶ To help shape better public policy by providing S&T input

# Options for Comm & Engagement

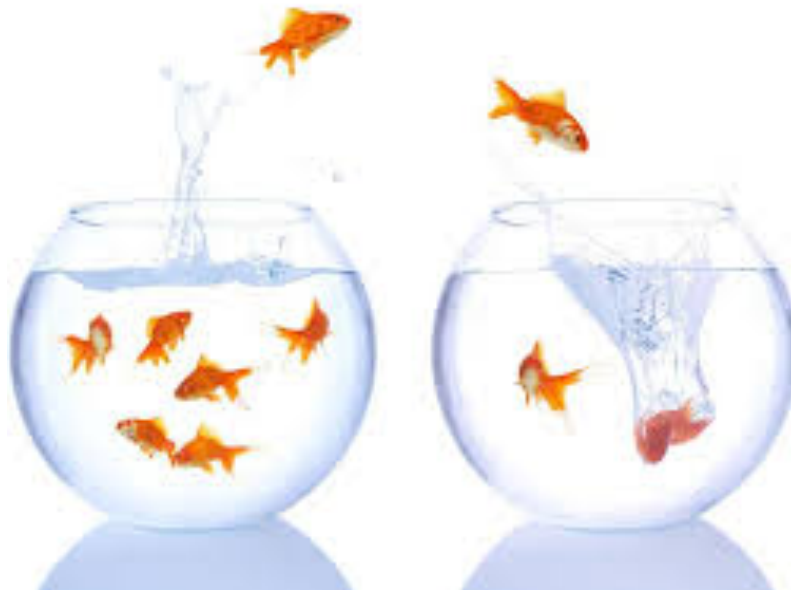
- ▶ Join a science society  
(legislative action network)
- ▶ Write an op-ed
- ▶ Reach out to your  
Congressional reps

District visits, DC visits, formal  
letters, staff email

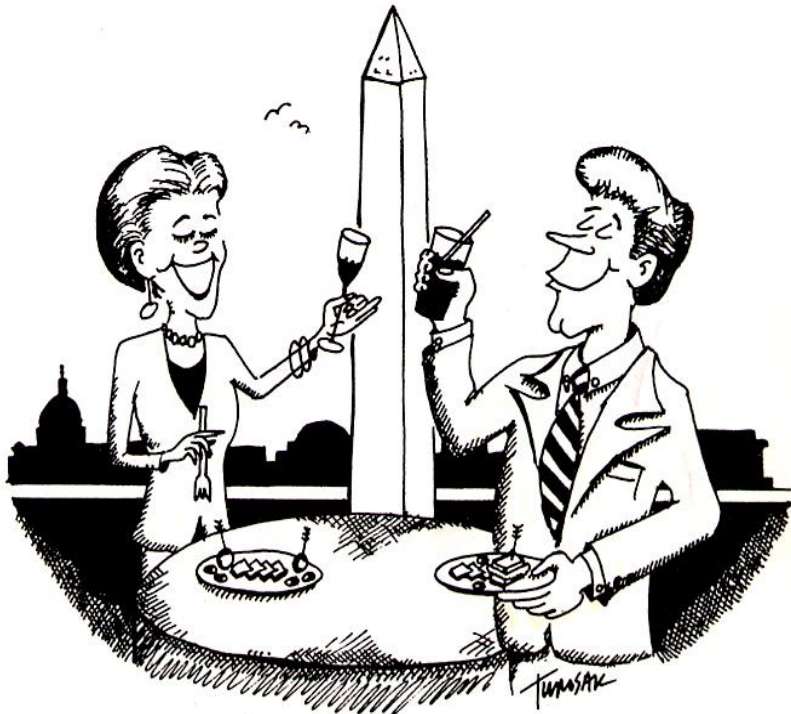
- ▶ Attend a town hall
- ▶ Introduce your  
community to research
- ▶ Judge science fair
- ▶ Run for school board

# Use the Disclaimer

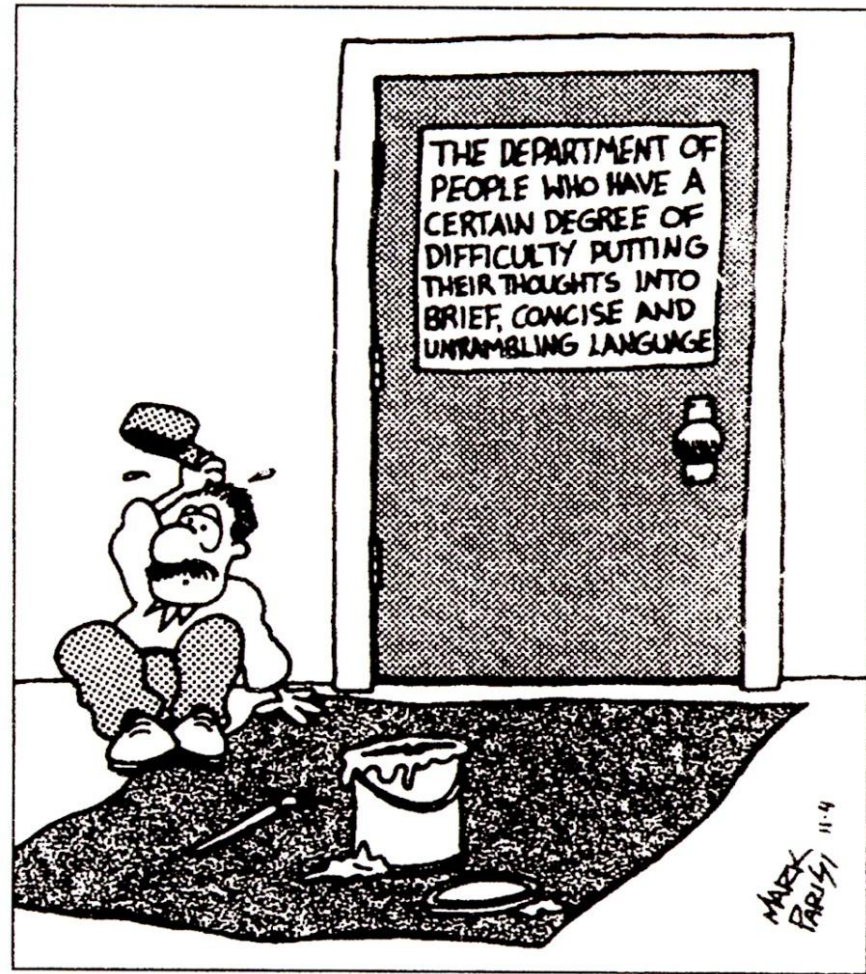
“These are my personal views and not those of [*Lockheed Martin*].”



# Congress + Science = Cultural Divide



*"I doubled majored in english and psychology and then went to Harvard law – how about you?"*



ATLANTIC FEATURE © 1995 Mark Parisi. Used with permission.

# Understanding the Cultural Divide

Specialists

Numbers

Objectives/facts

Hate to make promises

Quantitative

Technical

Ask why

Money = research

Think long term

Publicity avoiders

Science page

Generalists

Words

Subjective/public opinion

Love to make promises

Qualitative

Political

Ask why they should care

Money = getting re-elected

Think short term

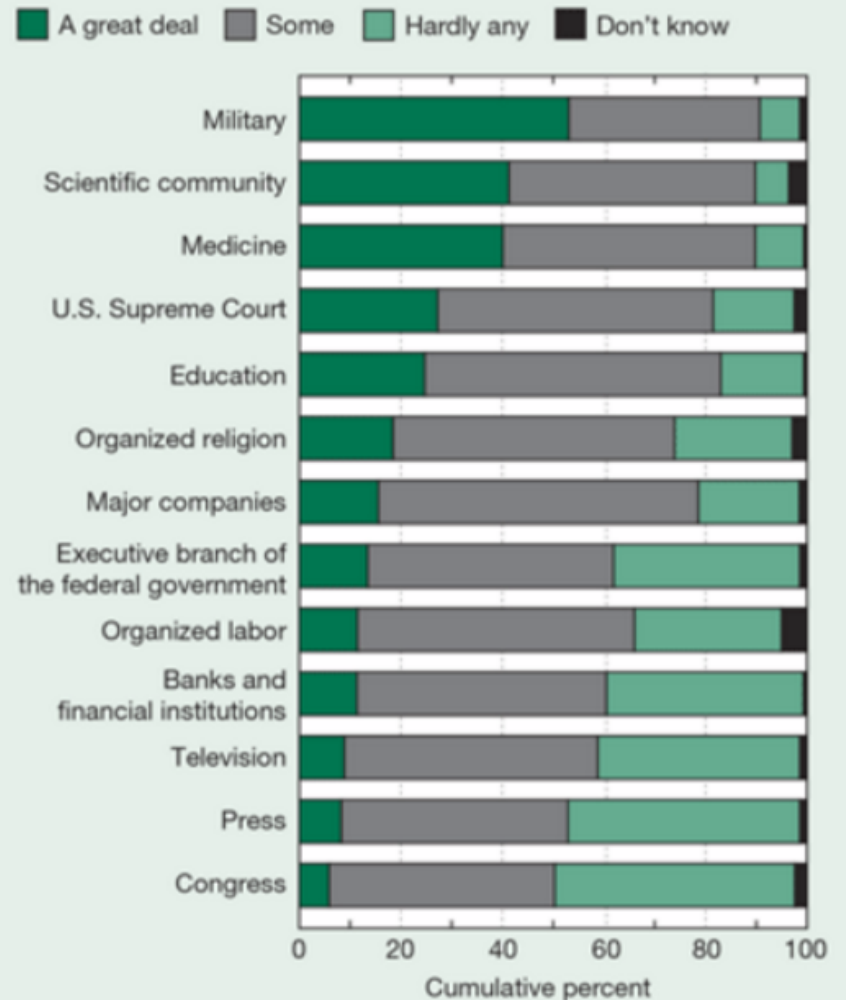
Publicity hounds

Front page

# Great news for scientists

scientists held in high esteem - second only to military leaders

Figure 7-15  
Public confidence in institutional leaders, by type of institution: 2012



NOTE: Responses to *As far as the people running these institutions are concerned, would you say that you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?*

SOURCE: University of Chicago, National Opinion Research Center, General Social Survey (2012). See appendix table 7-25.

Science and Engineering Indicators 2014



## Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term average

# Congressional Visits

## ► Keys to Effective Visit

**Be authentic, talk about what you know**

- Understand your audience
- Prepare your message/ask
- Tell (brief) compelling story

## ► Visit logistics

- Typical Flow

# Audience

- ▶ What is it like in a Congressional office?

**Controlled chaos!**

- ▶ Over 150,000 associations, representing millions of people vying for attention

American legion, children's cancer, milk, meat producers, right to life/choose, death penalty, nurses, unions, anti-hunger, aspca, Dream Act, gun rights/regulation, legalize marijuana

Visit will be short ~ 20 minutes, may occur standing in the hallway

# Audience

- ▶ Working with Congressional staff is important - they are:
  - ▶ Accessible; have the time & interest to work your issue; serve as eyes & ears of rep
  - ▶ May greet Congressional rep - privilege
- ▶ Who are staff?
  - ▶ Generally in mid-20s
  - ▶ Often, no science background
  - ▶ Average time in position = 8 months, avg term with office = 18 months

# Audience

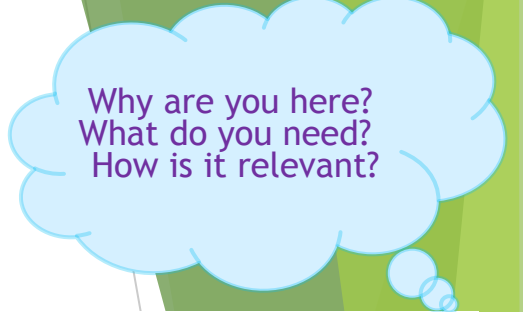
- ▶ Research Congressional rep in advance - background, committee assignments, caucuses, specific issue interests
- ▶ Look around the office
- ▶ Ask staffer a targeted question



- Why are you here?
- What do you need from us?
  - How is this relevant to Congressional Rep & District?



# Visit Flow~

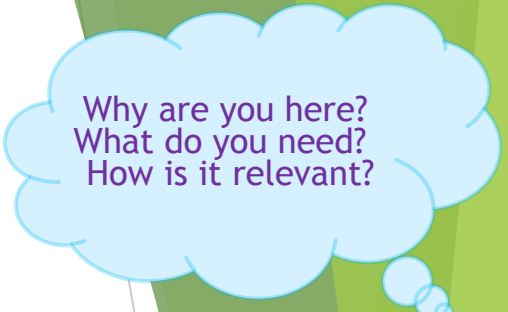


Why are you here?  
What do you need?  
How is it relevant?

- ✓ Introduce yourself - name, affiliation, where you are from
- ✓ Thank them for meeting with you
- ✓ State reason for visit (We are here today to...)
- ✓ Ask about them/their portfolio
- ✓ Deliver Message / Ask
- ✓ Explain how your work impacts your community, state or nation
- ✓ Thank them for meeting with you

*[In groups, select leader (constituent) - everyone talks, leader opens & closes, delivers leave-behind]*

# Message



Why are you here?  
What do you need?  
How is it relevant?

## ► What do you need?

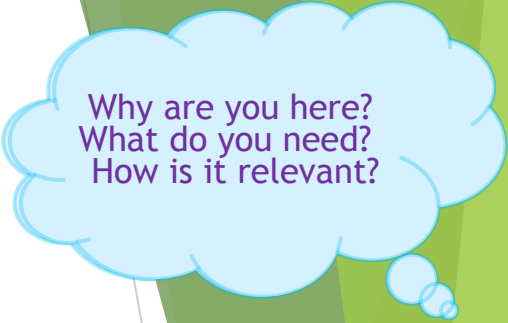
PLEASE SUPPORT ...

**For Example** - consistent, robust investments in  
R&D funding for [NASA, NSF, DOE Office of  
Science]



# Message

- ▶ Make it meaningful - link to something they already understand...Economy, Jobs, Technology, Education, Pollution
- ▶ Focus on impacts
- ▶ Take it home - give specific district impacts, examples



Why are you here?  
What do you need?  
How is it relevant?

# Message Spectrum

## National to Local

Why are you here?  
What do you need?  
How is it relevant?

“Thank you for your past support of the National Science Foundation. We support the highest possible funding levels for NSF.”

**“We support the President’s budget for NASA & DOD research.”**

“We now have an astronomy tool that is used to detect eye diseases earlier.”

“The research was able to tell us we would see more severe thunderstorms.”

“In my lab, several people work on DOE grants, many of us volunteer at local schools. At a science fair, once I saw...”

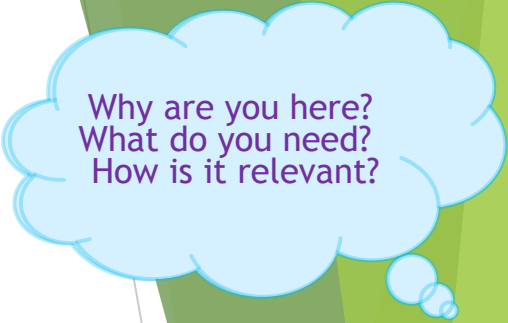
“Last year our region had the worst drought in the last 100 years, much of our state has not been geologically mapped...”

# Message

- Quote from a Congressional staffer:

*“Be ready to talk on two levels: if I know a lot about your issue and if I know nothing.”*

- Try to be quotable, paint picture
- Connect science to them via examples
- Develop 1-2 talking points
- Be concise: 1 -2 sentences
- Clear, non-technical language
- Get point across quickly



Why are you here?  
What do you need?  
How is it relevant?

# Scenarios

The legislator/staff listens carefully and asks few or no questions. This is a noncommittal meeting.

**"I will think about what you have said."**

This very common type of Hill meeting allows you to tell your story and express your opinions.

For some meetings this is all that you will accomplish, but try to get specific feedback and commitments.

- Ask questions to find out what could influence a decision.

- Does your legislator know how this issue impacts the community in their district?

Unless your legislator works on a relevant committee—don't expect staff to know much about the issue.

**"I'm new," and**

**"I don't know anything about science."**

Before delving into specifics, you might need to take a step back from your original plan to ensure the staffer has a complete understanding of the issue context. Discuss what the issue is, why it's important, and who it will impact.

Hill staffers use the information you provide to construct memos about your discussion for the policymaker. They'll greatly appreciate the perspective you provide

- Encourage questions—don't assume the staffer knows even basic information about the professions.

- Try to find a personal tie between the individual you're meeting with and yourself.

- Personalize your meeting with real life examples and make them remember you

**"I agree."**

Use this as the gateway to secure policymaker commitment to your position, and ask them to work with other members of Congress to secure support on issues.

- Get verbal commitment from your legislator/staff if possible.

- Indicate you will follow-up, as they'll be excited to hear of their official support

**"That is not my position" or "I disagree."**

This rarely happens as legislators and staff do not like to disagree with their constituents. Try to understand why the legislator may not support/oppose the issue so you can use this information in the future to work towards your position.

- Find out why there is disagreement.

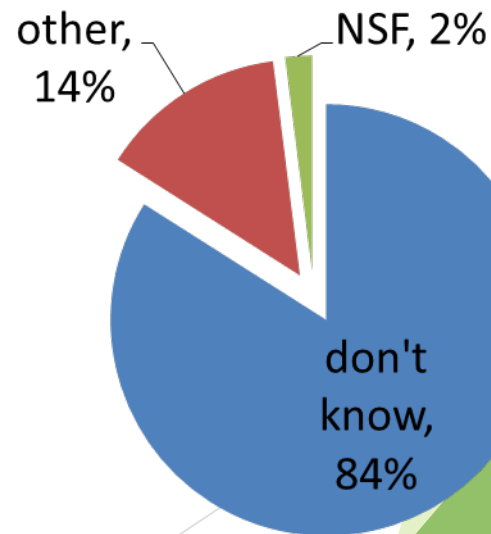
- Determine whether the problem is issue or politics.

- Agree that no bill/community is perfect and find out which part is a problem.

**86%** of Americans agreed :  
**"Science and technology are making our lives  
healthier, easier, and more comfortable."**

(2001 Science and Engineering Indicators)

What is the name of the  
government agency that  
funds most of the basic  
research and education  
programming in the  
sciences, mathematics and  
engineering in this country?



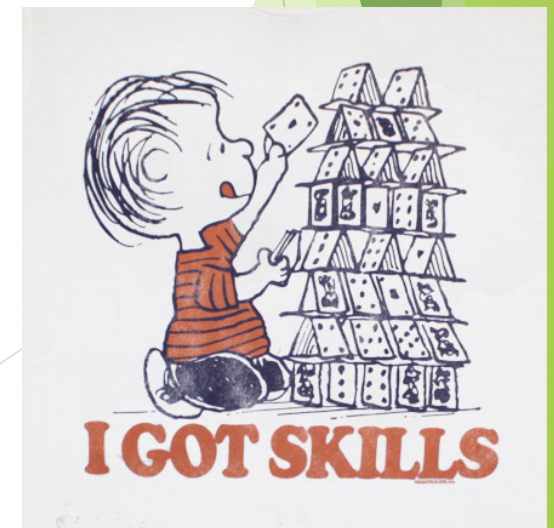
(Charlton Research for Research! America, 2001)




# Why Me?




Astronomical Society





“While I realize that scientists by nature often feel uncomfortable with advocacy, if we all stayed within our comfort zones, little would be accomplished. Though perhaps they are not well understood, scientists are highly respected in our society. They are also highly credible. When they speak with a unified voice, the people listen.”



**Hon. John Edward Porter**, at White House Office of Science and Technology Policy 25th Anniversary Symposium